

KINGSTON ASH RECOVERY PROJECT

MONTHLY REPORT

December 2012

Aerial Image of Kingston Ash Slide (11/29/2012)



0 1,000 2,000 3,000 4,000
Feet

Date of imagery: 11/29/2012

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Tennessee Valley Authority
Realty, GIS & Land Records

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MONTHLY REPORT

December 2012

SAFETY

- Eight (8) individuals attended site-specific Health, Safety and Environment (HSE) orientations during December 2012 – 2,306 project-to-date. Zero site-specific refresher courses were conducted during the month of December 2012 - 435 project-to-date.
- Sixty-seven (67) Safety Observation Reports (SORs) were submitted during December 2012 – 3,729 year-to-date; 3,727 are closed.
- There were zero (0) First Aids for December 2012.

INFRASTRUCTURE / ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Continued recovering cenospheres from the onsite ponds.
- Continued borrow excavation.
- Started Kingston Entrance Restoration project.

ASH SLURRY AND POND TOTAL SUSPENDED SOLIDS (TSS) CONTROL

- Daily total suspended solids (TSS) sampling and pH monitoring were performed throughout the ash slurry system. The TSS of the main ash pond effluent (agri-drain outlet) TSS averaged 85.6 mg/L and the Stilling Pond effluent averaged 16.6.5 mg/L for December 2012.
- TSS sampling was performed twice per day during placement of fill in the Stilling Pond for the Segment 3 buttress.
- The ash pond effluent polymer addition (Agri-Drain location) rates were adjusted based on TSS levels during December 2012. Ascetic acid was applied to control pH in the Stilling Pond.
- The plant began December 2012 with 7 units online; ran average of 4.6 units and ended the month operating 2 units.

PLANT ASH STORAGE / INTERIM ASH STORAGE AREA (BALLFIELD)

- Trans Ash placed and compacted dry fly ash during December 2012. Geosyntec provided quality control and assurance during December 2012.
- The Kingston Fossil Plant (KIF) operated from 2 to 7 units during December 2012, average of 4.65.

CENOSPHERE CONTROL ACTIVITIES

- Daily pond inspections were performed for all ponds.
- Collection of cenospheres by hydro-vacuum truck was not carried out in December 2012.

ROUTINE MONITORING

Surface Water Sampling

- Continued routine surface water monitoring. All monthly Stilling Pond results received to-date have shown compliance with the outfall National Pollutant Discharge Elimination System (NPDES) permit.
- There were rainfall events on December 10, 16, 20, 24, and 25, 2012 that triggered storm flow sampling in Swan Pond Embayment.
- Automated monitoring stations (Hydrolabs) are online continuously monitoring surface water conditions at 5 locations in the Settling Basin, Clean Water Ditch, Ash Pond Agri-Drains, and Stilling Pond. Continued daily TSS monitoring at the sluice trench, ash pond Agri-Drains and Stilling Pond.

Air Sampling

- All air monitoring results for December 2012 from the PM2.5 TVA air samplers were below the current Ambient Air Monitoring Plan (AAMP) action levels.

Data Management

- Provided monthly surface water and air monitoring results to the EPA.

Non-Routine Sampling

- Continued sample collection and on-site moisture testing in support of Dredge Cell and Ballfield operations.
- Continued confirmation sampling support for Middle Embayment ash removal.
- Continued spoils runoff sampling from the two tanks of spoils material associated with the Perimeter Wall Stabilization (PWS) project.
- Completed benthic community survey and associated sediment sample collection.
- Collected and shipped reference surface water, reference sediment samples, and plant hopper ash to the University of Colorado in support of a leaching study of ash impacted river bed sediments.
- Completed inventory and disposal of biota sample retains returned from Pace Laboratories.

DREDGE CELL

- TVA continued drying materials in the dredge cell and hauling dry materials to the active ash stacking.
- Geo-Con continued predrilling / jet grouting for repairs in Segment 7.
- TVA continued infill stacking along Segment 7 together with excavation of the corner of the Relic at Segment 6 platform, when weather permitted. Stacking was curtailed in mid-December due to prolonged wet weather conditions.
- Mt. Carmel continued lime treatment of spoils in boxes alongside Drag Line Road.

LATERAL EXPANSION

- Geo-Con completed PWS construction in Segment 2 and mobilized equipment and supply lines to Segments 3 and 4.
- TVA continued stacking of ash in the Ash Pond and Lateral Expansion, when weather permitted. Stacking was curtailed in mid-December due to prolonged wet weather conditions.
- TVA completed construction of the working platform for Segment 4.
- TVA continued construction of a rock buttress in the Stilling Pond alongside Segment 3.
- Griffin completed installing dewatering wells in Segment 4 and began operations.

RIVER SYSTEM RESTORATION

- TVA transmitted the removal action work plan for the River System to EPA/TDEC.

EMBAYMENT RESTORATION AND RECREATION AREA DEVELOPMENT

- Revised Lakeshore Phase 1 Scope of Work and provided to bidder for revised pricing.

MIDDLE EMBAYMENT

- Ash removal from the Middle Embayment was carried out only 4 days during the month as equipment was diverted to time critical tasks.
- Weekly Middle Embayment status reports were submitted.
- Concurrence KIF-12-003 and KIF-12-004 were approved.
- Rock from T-2 sediment pond was recovered for use in other features.

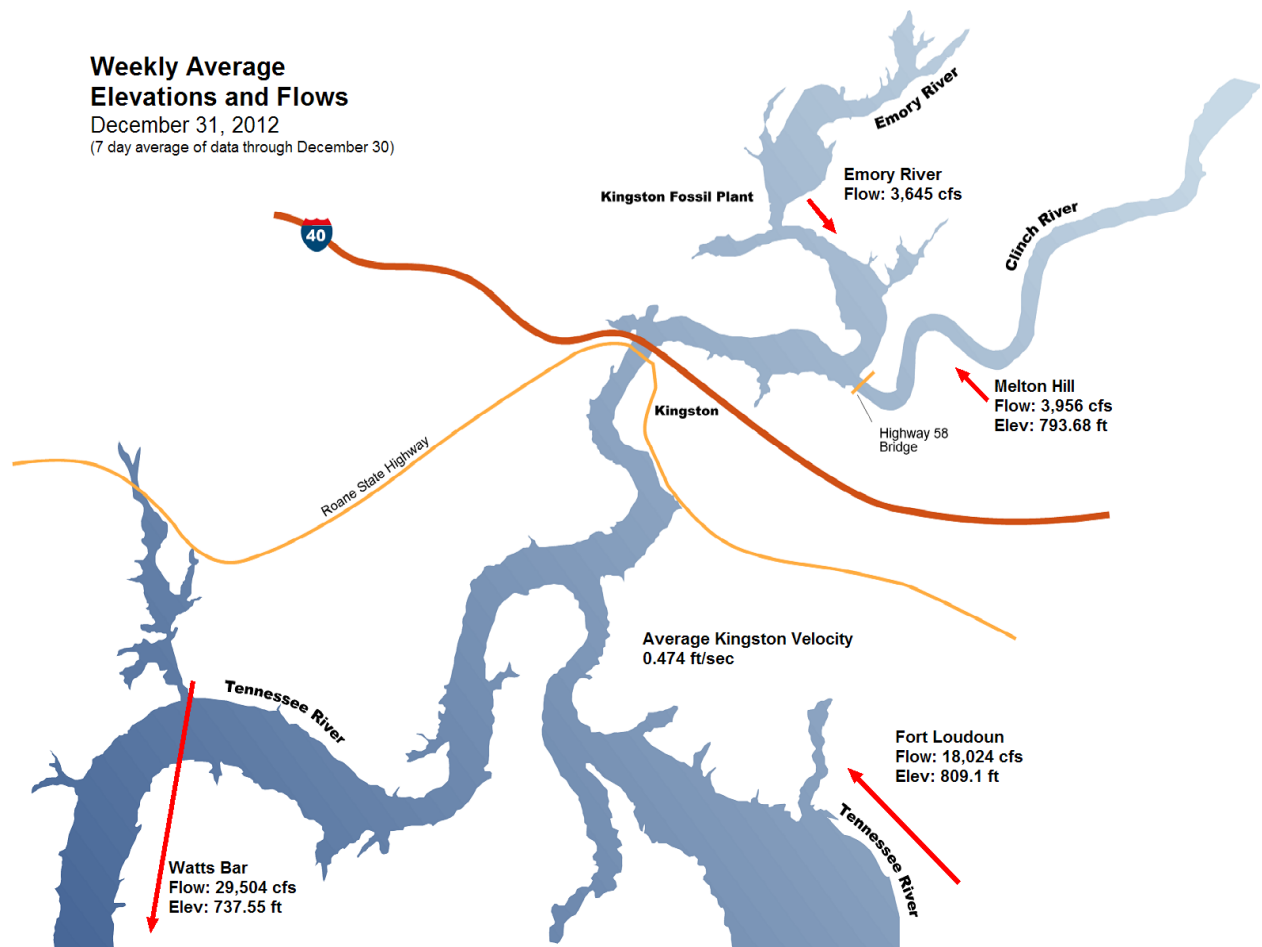
OUTREACH / COMMUNICATIONS

- Added weekly area resident updates to Kingston Ash Recovery website.
- Sent weekly updates to the Community Advisory Group (CAG), public officials and members of the public who have signed up to receive weekly emails.
- Updated administrative record with work plans and relevant documents.
- Continued to respond to calls from residents.
- Updated site bulletin boards.

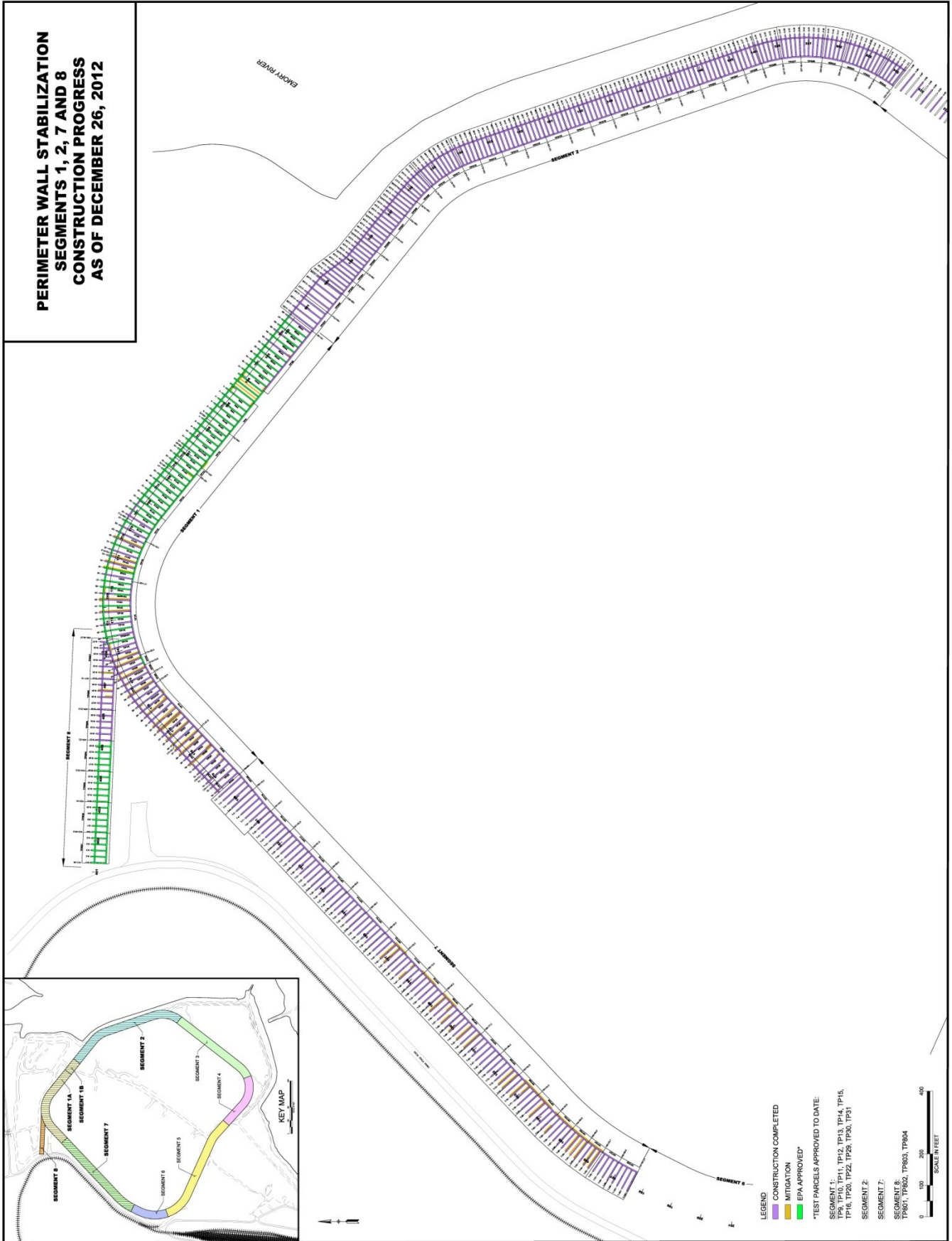
RIVER OPERATIONS

Weekly Average Elevations and Flows

December 31, 2012
(7 day average of data through December 30)



**PERIMETER WALL STABILIZATION
SEGMENTS 1, 2, 7 AND 8
CONSTRUCTION PROGRESS
AS OF DECEMBER 26, 2012**

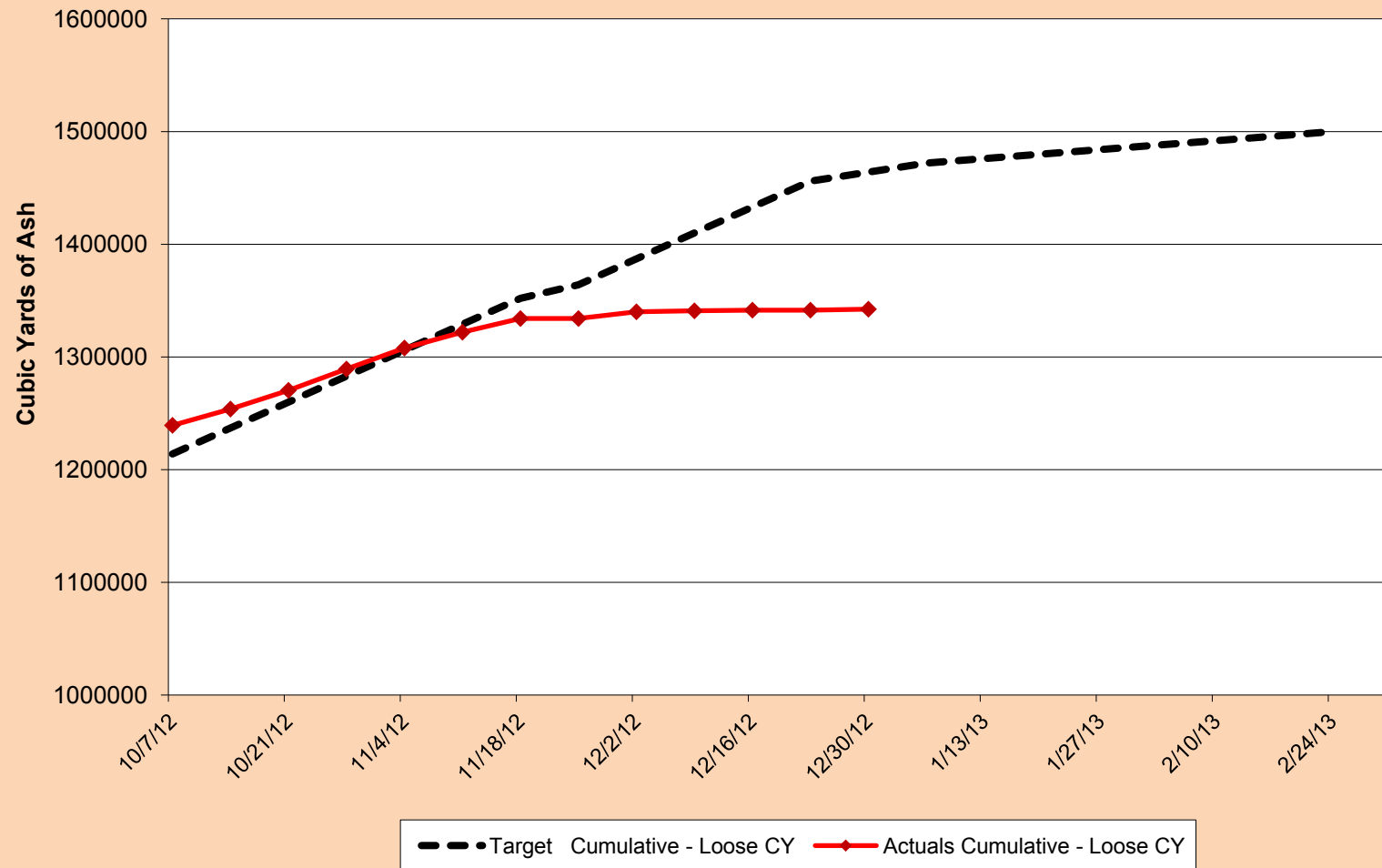


Kingston Ash Recovery Project			December 2012		Field Report
Safety			Monthly Total	FY – Cumulative Total	
Near Misses			0	0	
First Aid Incidents			0	5	
Recordable Incidents			0	0	
Recordable Lost Time Incidents			0	0	
Environmental	Matrix	Samples	Analyses	Results	
Organization - TVA	Surface / Utility Water	5,778	48,445	242,343	
Organization - TVA	Groundwater (Spring & Well)	259	2,704	13,223	
Organization - TVA	Ash	760	1,272	9,290	
Organization - TVA	Soil / Sediment	601	1,324	9,777	
Organization - TVA	Biota	5,235	12,619	134,229	

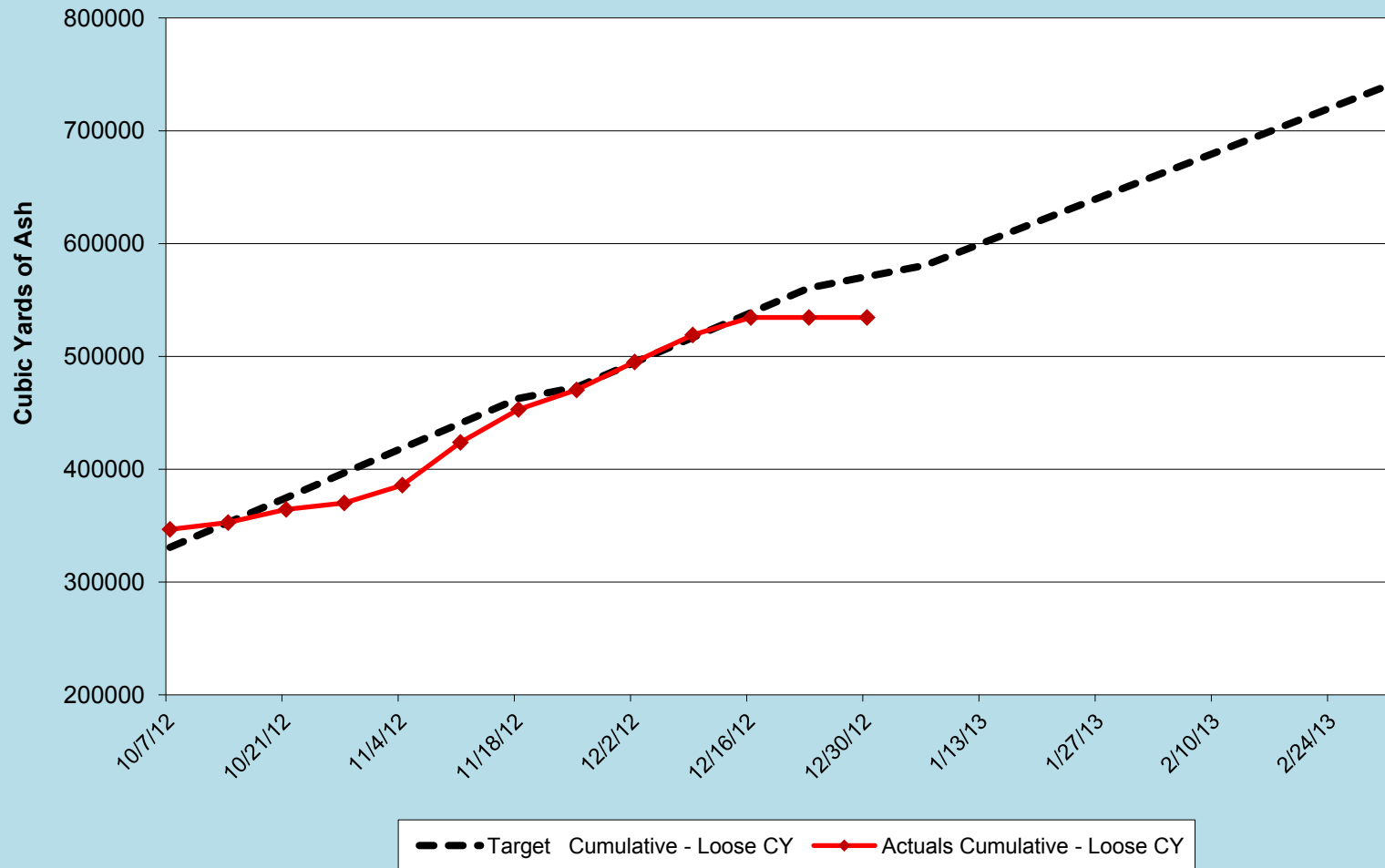
Work Description	Period Work Performed (CYIP)	PTD Work Performed (CYIP)
Ash Removal / Excavation		
Total Removed from Middle Embayment	1,638	963,004
Total Removed from North Embayment	-	1,010,322
Total Removed from Settling Basins / Dike 2	-	32,369
Excavated Total	1,638	2,005,695
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Placement		
Total Placed in Dredge Cell	13,956	1,338,845
Total Placed in Lateral Expansion	14,451	607,778
Total Placed in Ash Pond	3,833	393,981
Total Placed in Stilling Pond	13,196	17,641
Placed Total	32,240	2,340,603
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Storage Handling		
Total Removed from Lateral Expansion	172	53,829
Total Removed from Dredge Cell	38,958	810,734
Total Removed from Ballfield	11,123	467,863
Removed from Storage Total	50,253	1,332,427
Net Removed to(from) Ballfield Storage	(10,577)	(135,785)

For period ending December 31, 2012.

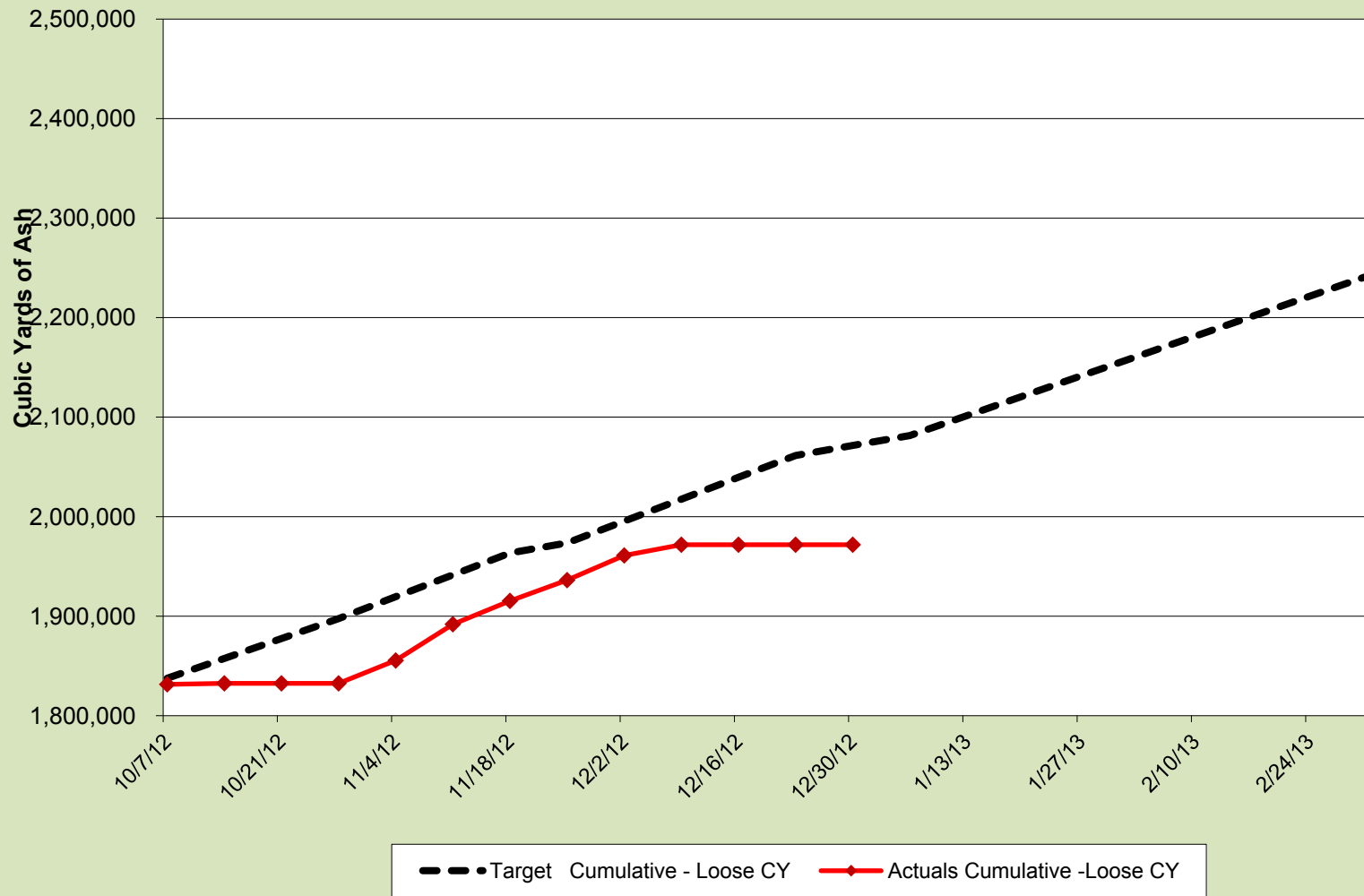
Ash Excavation from Middle Embayment Weekly as of December 30, 2012



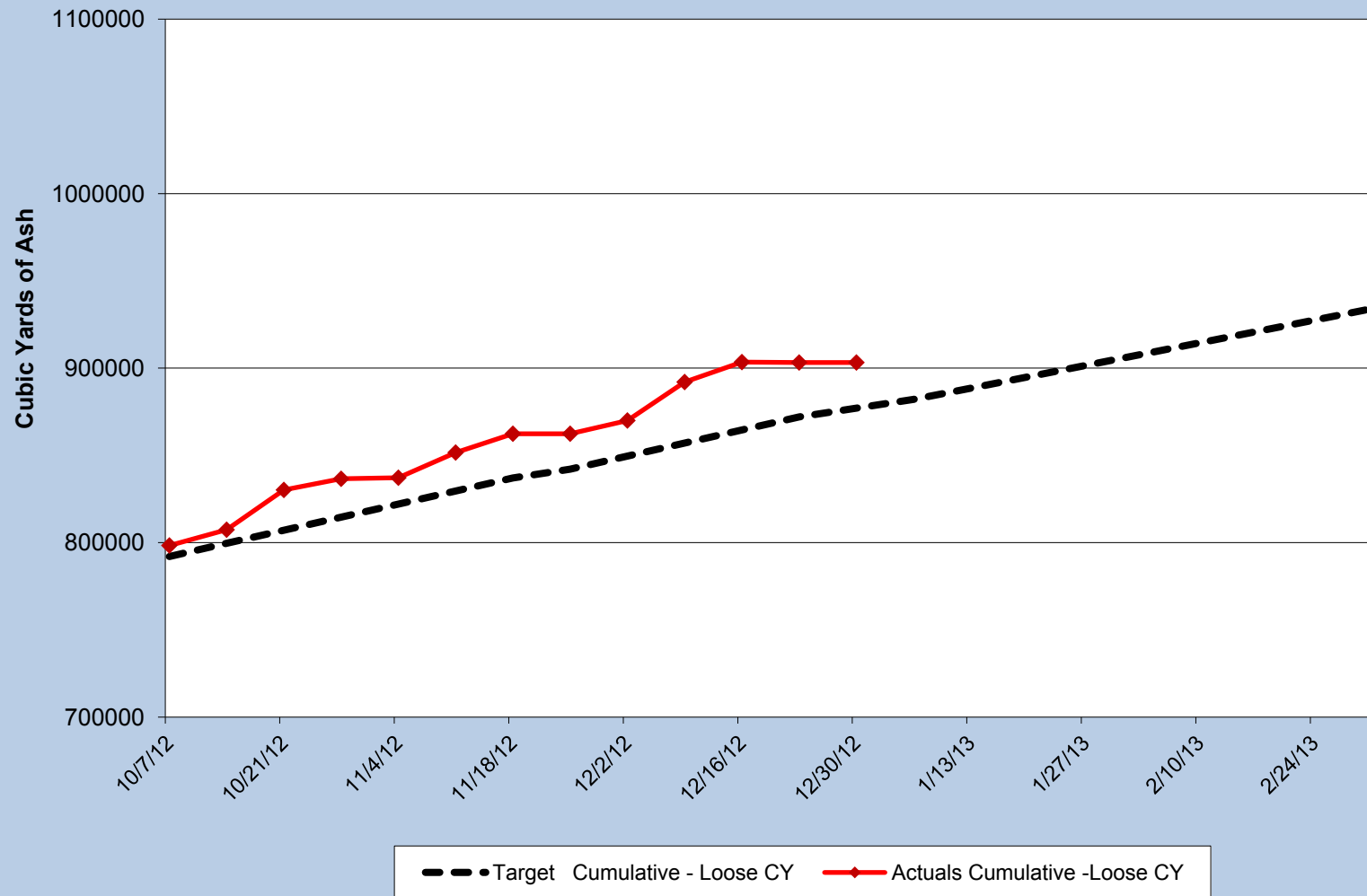
**Ash Excavation from Dredge Cell Relic
Weekly as of December 30, 2012**



Ash Stacking in Dredge Cell **Weekly as of December 30, 2012**



Ash Stacking in Lateral Expansion Weekly as of December 30, 2012



**Perimeter Wall Stabilization Segment 1, 8, 7 & 2
Weekly as of December 30, 2012**

